Greek Polytonic – Easy Accent
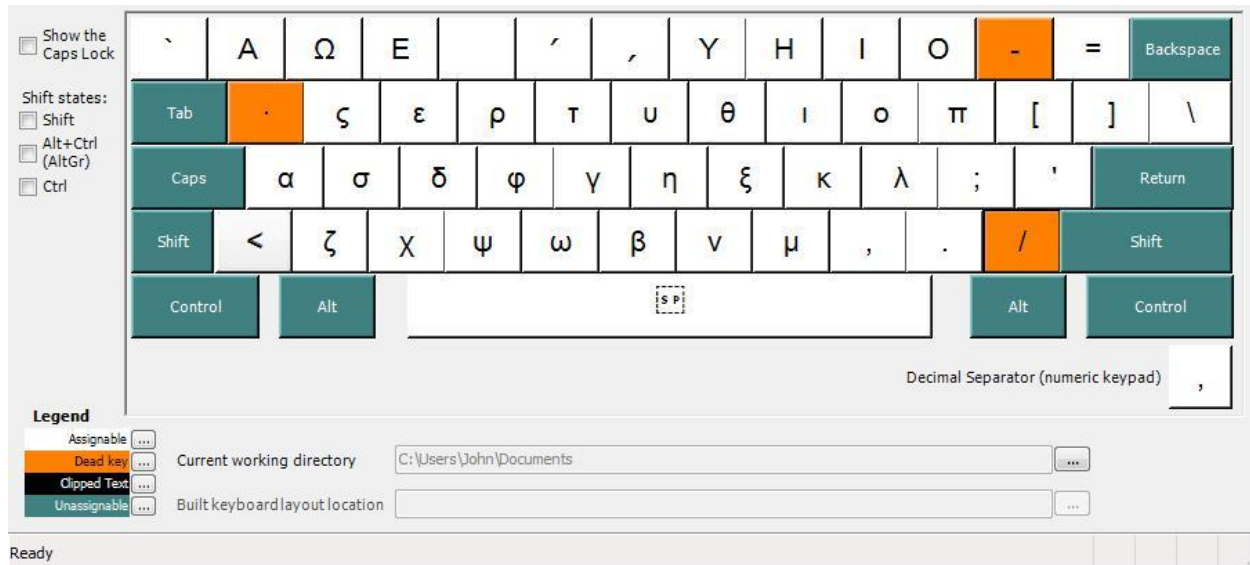
This document contains four sections:

Overview

Easy Accent is a custom Greek Polytonic keyboard that John Schwandt (Senior Fellow New Saint Andrews College) created to facilitate typing in ancient Greek while using the modern national Greek keyboard layout. Microsoft comes with a Greek Polytonic keyboard that anyone can add to their Windows system. Once added all you need to do is press Alt+Shift to change from typing in English to typing in Greek. Since this is done in the operating system it works in any program, even in system programs such as naming files and directories. It has all of the letters in the same location as the modern national system but this doesn't leave much room for all of the possible diacritic marking combinations. If you have tried to access these marking in this keyboard you understand how difficult and unintuitive it is. There had to be an easier way.

Since Greek is generally written either in uncials (upper case) or miniscules (lower case) forms without frequent shifting between the two, the Shift Key seemed to be better used for one of the far more frequent accent marks. This lead to the development of all accents being shift states rather than dead keys. The trick was to find three shift states that would still allow for all case form and not conflict with the "control" or "alt" shift states which many programs use for hotkeys. The Easy Accent keyboard uses Shift, AltGr (right Alt), and AltGr+Shift for these shift states. Dead keys are only used for breathers, subscript, and length markers.

Below is a description of the keyboard layout and instructions on how to install the keyboard. It works within the Windows operating system so there are no shell programs that run while your type. It is shareware so it is free.

Easy Accent Keyboard Layout

All letters are in the same locations as the windows Greek keyboards, except there are capital vowels and numeral symbols on the typical number line of the keyboard. Typical numbers can be accessed in their normal location with Caps Lock on.

The big difference between this custom keyboard and the standard Greek Polytonic keyboard is the placement of the diacritic marks. Instead of having the acute accent mark scattered across the keyboard as a series of dead keys to account for all of the acute combinations, the Easy Accent keyboard has one key that the only key used for the acute and a similar system for the other accents. Further the accents are shift states rather than dead keys. So you immediately see the vowel with the accent rather than hitting an accent first (with no display) and then the vowel.

Accenting

Here are the shift states for accenting.

Shift = acute

Right Alt (also known as AltGr or Alt + Ctrl) = grave

Right Alt + Shift = circumflex

 Since shift is now used for something other than capitalization for vowels (it still capitalizes consonants), you must use Caps Lock to generate a capital vowel or the number row for accented capitals (with the same accenting procedure listed above). The order of the vowel locations in the number line correlates to the location of lower case vowels.

Breathing Marks

Breathing marks are located on the "q" key and operate as a dead key. If you want to place a breathing mark over a vowel (with or without accenting), you must press the "q" key first. Shift + "q" yields the rough breather and "q" without shift yields a smooth breather. This produces any combination of breathing and accent mark when used in conjunction with a vowel in a particular shift state.

The "q" key is the only key where a breathing mark is produced. So you don't need to hunt around the keyboard for various combinations of a breathing mark and other diacritics. If you need an iota subscript in addition to a breathing mark, use Right Alt + "q" for a smooth breathing mark and subscript and Right Alt + Shift + "q" for a rough breathing mark and subscript.

Here is the summary for breathing marks.

q -> accented vowel = accented vowel with smooth breathing

Q (shift + q) -> accented vowel = accented vowel with rough breathing

Right Alt + q -> accented vowel = accented vowel with smooth breathing and subscript

Right Alt + Q (shift + q) -> accented vowel = accented vowel with rough breathing and subscript

Iota Subscript without Breathing Mark

To produce an iota subscript without a breathing mark use the forward slash (question mark) key prior to a vowel (with or without its accenting).
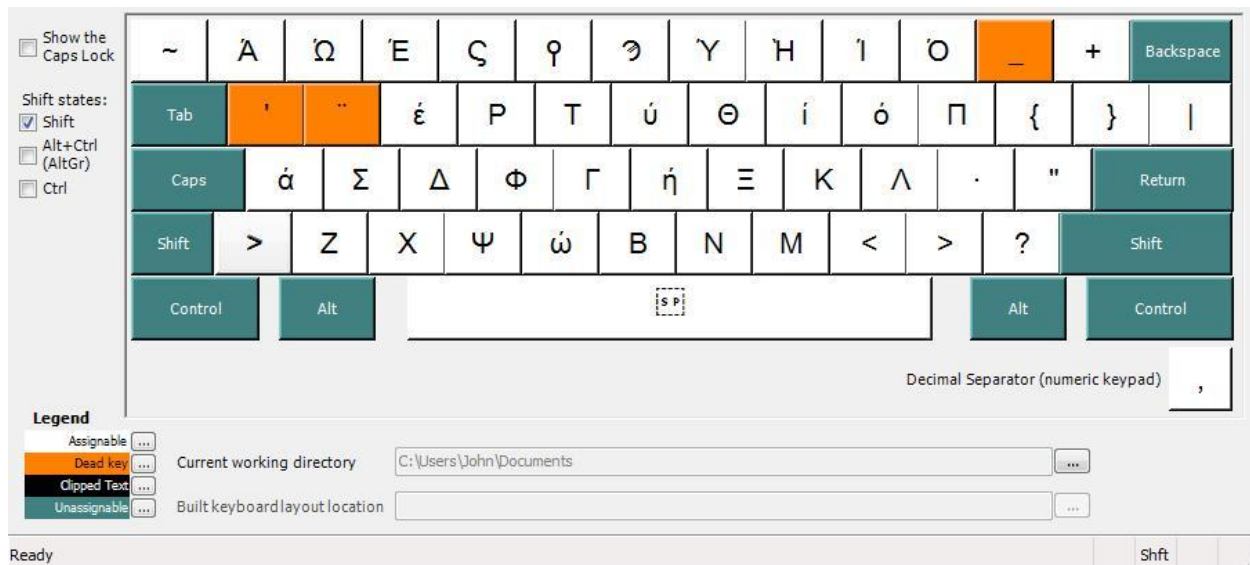
Breve and Makron Mark

Press the "minus" key prior to a vowel to produce a makron and Shift + "minus" for a breve mark over the vowel. All symbols with these marks contained in the Greek Extended character set are provided. Currently Unicode doesn't have symbols for accents and length markers. If they ever create those combinations, this key will be able to handle them.

Shift State Graphics

Shift State

Below is a graphic of what each key is with Shift depressed. Notice all of the vowels have an acute, lower case letters in their typical locations and capitals on the number line.
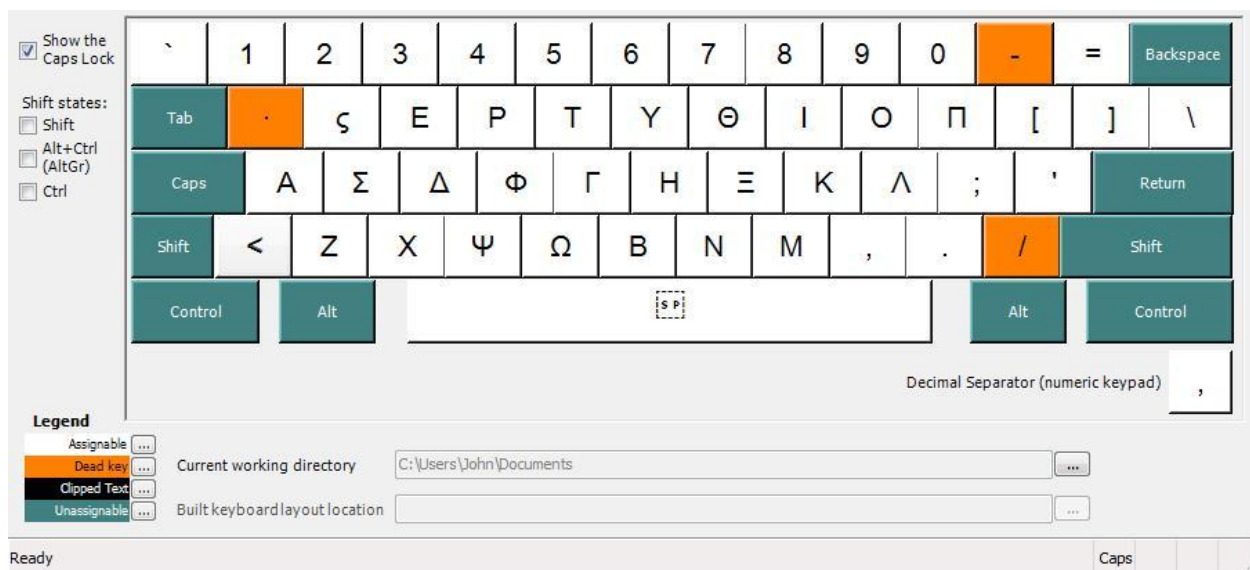
There are three dead keys in the shift state. There are highlighted on this graphic . Shift + "q" produces a rough breathing mark when followed by a letter that takes a breathing mark. Shift + "w" produces a dieresis when followed by a letter that can take that symbol.   Shift + "minus" produces a breve when followed by a letter that can take that symbol.

The Greek colon (single dot) is located where the English would be. There are three archaic letters on the number line as well.

Caps Lock State

Below is a graphic of each key with the Caps Lock on. Notice that all letters (consonants and vowels are capitalized in their normal positions. So it is easy to type in uncials if you desire. This is also the place for Arabic numerals on the number line.
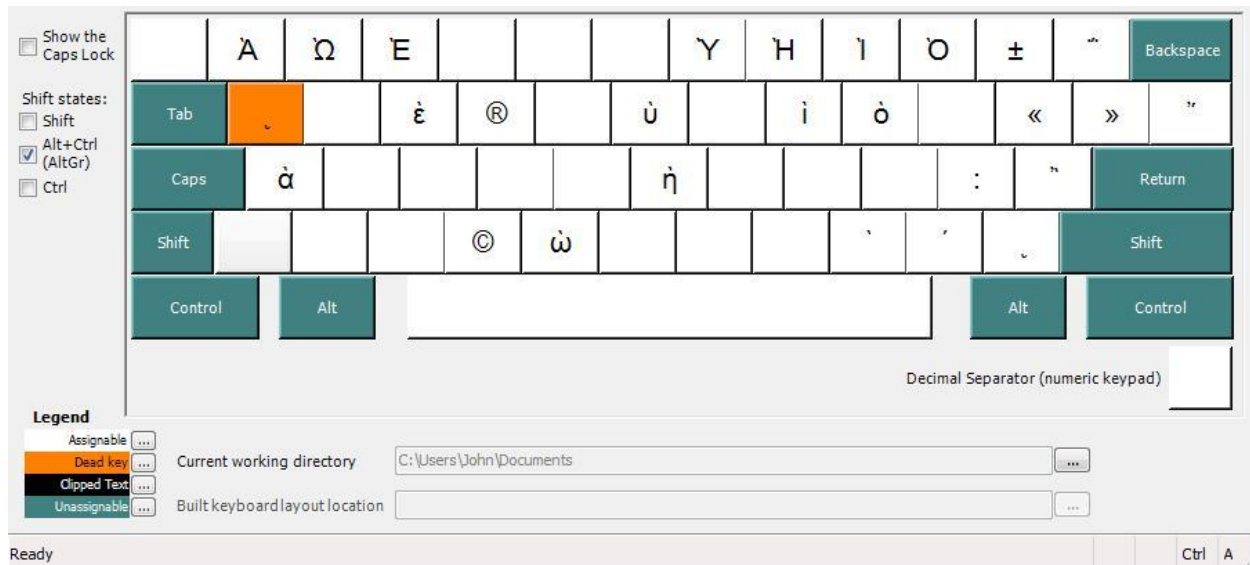

All breathing marks, subscripts and length marks continue to work with Caps Lock on. The acute also works.

Exception:

Since the windows operating system does not recognize Right Alt + Caps Lock grave and circumflex do not work within the alphabet layout. The typical way for accenting capitals should be from the number line in the normal state where all accents and shift states are available. This should not be a problem since passages written in all caps normally don't contain accenting.
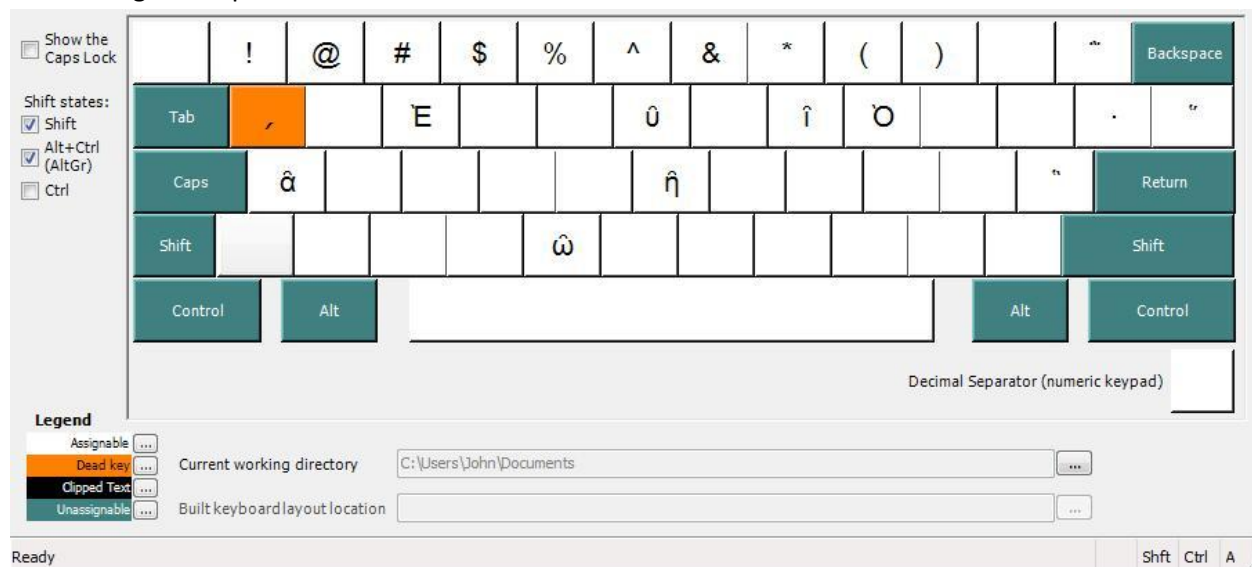
Right Alt State

The Right Alt key triggers the grave state for vowels as seen in the graphic below. It also allows for other typical AltGr keys.

The Right Alt key (also known as AltGr) is actually Alt+Ctrl. All most programs recognize this, however if the single Right Alt key appears not to work properly try using the more difficult Alt+Ctrl for that program. Although most Microsoft programs recognize the Right Alt as Alt+Ctrl , including Word Pad, Works, Internet Explorer, Power Point, Excel, etc., there is one glaring exception. Word 2007 does not recognize it, so you have to press Alt+Ctrl for grave in Word 2007. However if you want to avoid that issue you can type your Greek in anther program and cut and paste it into word or use another word processer like Open Office or Google Docs. If you are really motivated about this problem feel free to write Microsoft and ask them to bring AltGr back in Word to make it consistent with Windows and their other programs.

Right Alt + Shift State

The Right Alt + Shift key triggers the circumflex state for vowels as seen in the graphic below. This makes sense is the original tone of circumflex was a combination of acute and grave.   This also the place for the traditional shift state for numbers. For epsilon and omicron, which don't take circumflex an additional grave capital is accessible.

Installation Instructions (from Microsoft Keyboard Layout Creator)

Installing Keyboard Layouts on Windows Vista

Note: On Vista, the keyboard layout will automatically be added to the language bar on install and removed on uninstall. The following instructions only relate to adding the keyboard layout for other users on a machine.

In Windows Vista, a keyboard is known as an input language. To add an input language, you first start in the control panel, where you can find the icon for Regional and Language Options.

Click the icon to launch the dialog. Then choose the Keyboards and Languages tab in the middle.

Click the Change Keyboards... button to launch the Text Services and Input Languages dialog.

You will see a 'tree' listing of your input languages, where each main node is a language/region pairing and each branch underneath is a specific input method. From there, click the Add button to add an input language. This will launch the Add Input Language dialog.

Select the language you want the keyboard to appear under and then select your custom keyboard layout, then click OK.

You will be returned to the Text Services and Input Languages dialog, and you will be able to see your custom keyboard layout added to the tree

Installing Keyboard Layouts on Windows XP/Windows Server 2003

Note: On Windows XP and Windows Server 2003, the keyboard layout will automatically be added to the language bar on install and removed on uninstall. The following instructions only relate to adding the keyboard layout for other users on a machine.

In Windows XP and Windows Server 2003, a keyboard is known as an input language. To add an input language, you first start in the control panel, where you can find the icon for Regional and Language Options.

Click the icon to launch the dialog. Then choose the Languages tab in the middle.

Click the Details button to launch the Text Services and Input Languages dialog.

You will see a 'tree' listing of your input languages, where each main node is a language/region pairing and each branch underneath is a specific input method. From there, click the Add button to add an input language. This will launch the Add Input Language dialog.

Select the language you want the keyboard to appear under and then select your custom keyboard layout, then click OK. You will be returned to the Text Services and Input Languages dialog, and you will be able to see your custom keyboard layout added to the tree.

Unfortunately, if you want to see the custom keyboard in the Language Bar, then things get a little more complicated. The reason is that the Text Services Framework makes an assumption that the user does not need to see the specific information about the exact type of input method if they only have one under a language. The upshot of this is that when you look at the language bar, it will only mention the language "Kannada" for the custom keyboard and not that it is the custom keyboard.

The only way to work around this is to install another input method under the same language, loading the original Kannada keyboard at the same time as the custom one. Once you do this you can click the "Language Bar..." button in the lower left hand corner of the dialog and it will bring up the "Language Bar Settings" dialog. Make sure the first, third, and fourth CheckBox controls are checked, and click OK.

Once all of this has been done, the language bar will show a slightly different UI (the one shown in Figure 8). In addition to the language dropdown, an input method dropdown will be present to switch between input methods.

It is important to note that the extra step of adding an additional input method under the same language as the custom keyboard is only required if you want to *see* the custom keyboard listed layout in the language bar, as you can in prior versions of Windows. If you only select the one custom keyboard, then you can trust that it is the one that will be used when you switch to the appropriate language.